

Amendments to the claims

Please amend the claims such that the results are:

1 – 72 (Canceled).

73. (Currently amended) A method of assembling a Coriolis flow meter, comprising:

providing a flow meter structure having a base and two legs, where the two legs are attached to the base and are in a spaced apart relationship, the two legs each having a cylindrical opening through the leg, where the two cylindrical openings are aligned in a co-axial relationship;

providing a non-rigid flow tube having an outer diameter, where the outer diameter is configured to fit into the two cylindrical openings in the two legs while leaving a predefined gap;

placing the non-rigid flow tube into the two cylindrical openings where a section of the non-rigid flow tube extends between the two legs, and where the non-rigid flow tube creates two predefined gaps between the outer diameter of the non-rigid flow tube and the inner diameter of the two openings;

inserting an adhesive in the two predefined gaps;

holding the section of the non-rigid flow tube extending between the two legs in an essentially straight configuration while the inserted adhesive cures.

74. (Previously presented) The method of claim 73 where the adhesive is inserted into each predefined gap through an adhesive opening in each leg, where each adhesive opening intersects and is perpendicular to the cylindrical opening in each leg and where the axis of the two adhesive openings are in essentially the same plane and where the adhesive openings and the cylindrical openings are held in a horizontal orientation while the adhesive is inserted.

75. (Currently amended) The method of claim 73 where the outer surface of the non-rigid flow tube is etched in at least one of a plurality of attachment areas whereby an attachment area is an area where the non-rigid flow tube is attached to another surface.

76. (Previously presented) The method of claim 75 where the etching is done using a sodium naphthalene etchant.

77. (Canceled).

78. (Currently amended) The method of claim 73 where the section of the non-rigid flow tube extending between the two legs is held in an essentially straight configuration by providing a fixture block where providing the fixture block comprises:

inserting a first section between said first leg and said second leg of said base where the first section has a first tube opening portion on an end of the first section; and inserting a second section between said first leg and said second leg of said base where the second section has a second tube opening portion on an end of said second section, said end of said second section adapted to fit adjacent to said end of said first section to form a fixture block, said fixture block having a tube opening formed from said first tube opening portion and said second tube opening portion, and where the non-rigid flow tube is held in the tube opening portion of said fixture block.

79. (Currently amended) The method of claim 78 where providing the fixture block further comprises:

providing a driver opening extending from a surface of said fixture block and intersecting said tube opening of said fixture block where a driver is attached to said non-rigid flow tube using said driver opening; and

providing at least one pick-off opening extending from said surface of said fixture block and intersecting said tube opening of said fixture block where at least one pick-off is attached to said non-rigid flow tube using said at least one pick-off opening.

80. (Currently amended) The method of claim 79 where the providing fixture block further comprises:

providing an alignment means adapted to fit in said openings of said fixture block and extend from said surface of said fixture block to an area adjacent said tube opening of

said fixture block where the alignment means is used to hold the driver and the at least one pick-off in an aligned position with respect to the non-rigid flow tube while being attached to the non-rigid flow tube.

81. (Previously presented) The method of claim 79 where providing the fixture block further comprises:

providing a securing means adapted to secure said first section and said second section to said base of said flow meter to align said driver opening of said fixture block with a driver opening in said base and to align said at least one pick-off opening of said fixture block with at least one pick-off opening in said base and using said securing means to secure said first section and said second section to said base.

82. (Currently amended) The method of claim 73 where the non-rigid flow tube is made of perfluoroalkoxyethylene (PFA).

83. (Currently amended) The method of claim 73 where the non-rigid flow tube is made of polytetrafluoroethylene (PTFE).

84. (Previously presented) The method of claim 73 where the adhesive comprises a cyanoacrylate adhesive.

85. (Currently amended) The method of claim 73 further comprising:

providing a plurality of components configured to attach to the section of the non-rigid flow tube extending between the two legs;

aligning the plurality of components to a predefined set of locations along the non-rigid flow tube;

attaching the plurality of components to the non-rigid flow tube using the adhesive.

86. (Previously presented) The method of claim 85 where at least one of the plurality of components is a driver.

87. (Previously presented) The method of claim 85 where at least one of the plurality of components is a pickoff.

88. (Currently amended) The method of claim 85 further comprising:

testing the position of the plurality of components by vibrating the non-rigid flow tube using at least one of the plurality of components to drive the vibration and using at least one of the plurality of components to sense the vibration of the non-rigid flow tube.

89. (Previously presented) The method of claim 88 further comprising:

adjusting the predefined locations for the plurality of components based of the result of the tested positions.

90. (Currently amended) The method of claim 73 further comprising:

manufacturing the provided non-rigid flow tube by extruding a section of the non-rigid flow tube wherein the extruded section of non-rigid flow tube has a temperature above room temperature;

securing the section of extruded non-rigid flow tube to hold the longitudinal shape of the non-rigid flow tube straight as the non-rigid flow tube cools.